

Abstract

In accordance with the invention there is provided a semiconductor capacitor having a first semiconductor layer which forms a first capacitor electrode and which includes silicon, a second capacitor electrode and a capacitor dielectric including praseodymium oxide between the capacitor electrodes, in which provided between the capacitor dielectric including praseodymium oxide and at least the first semiconductor layer including silicon is a first thin intermediate layer representing a diffusion barrier for oxygen. In particular the thin intermediate layer can include oxynitride.

Figure 1